

1966-1967, V. 1

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
 Paulauskas, V. K. (Vil'nyus). On the Approximations of Functions With Their Derivatives.

Call Nr: AP 1108825

95

Mention is made of Kolmogorov, A. N.

Polozhiy, G. N. (Kiyev). Integration With Respect to Conjugated Variables.

95-96

Mention is made of Lukomskaya, M. A. and Markushevich, A. I.

There are 5 references, 4 of which are USSR, and 1 English.

Rakhmanov, B. N. (Saratov). On Some Classes of Analytic Functions.

96

Remez, Ye. Ya. (Kiyev). Some Problems Connected With Analyzing the Unique or Multivalued Solution of the Chebyshev Problem for Incompatible Systems of Linear Equation.

97-98

Card 30/80

X

PAULAVA, A.

Our guests from Canada, Rnb. 1 1111.31 no.8:4 Ag'55. (MIRA 8:11)
(Women, Canadian)

PAULAVA, A.K.

Amount of Nickel in donors' blood. A. K. Paulava.
 Vestn. Akad. Nauk Belar. S.S.R., Ser. Biol. Nauk
 1954, No. 3, 88-91. — Whole blood of 30 blood donors, men
 and women from 18 to 48 years of age, contained from 13.8
 to 43.7, blood plasma from 10 to 25.8, and erythrocytes from
 16.8 to 40.5 γ Ni/100 ml., resp. Men's blood contains
 slightly more Ni (from 15.9 to 48.7) than does women's
 blood (from 13.8 to 38.4 γ). In both, the men and women
 donors, the amt. of Ni in the winter-spring season is less
 (from 15.9 to 38.1 in men, and from 13.8 to 27 in women)
 than in autumn (from 24.5 to 48.7 and from 26.4 to 38.1 γ /
 100 ml. blood, resp.). In men's organs Ni is present also:
 in liver 0.090, pancreas 0.041, spleen 0.040, muscle 0.02,
 and in brain 0.021 μ g. (the corresponding beef tissues con-
 tain 0.125, 0.135, —, 0.002, 0.033, and spermatozoa 0.282
 mg. Ni/kg. tissue, resp.). It is concluded that Ni plays an
 important role in the physiol. functioning of the human
 body.
 E. Wierzbicki

PAULAVA, A.K., kandydat medytsynskikh nauk.

Amount of cobalt, copper, and iron in the blood of children in
lymphogranulomatosis. Vestsi AN BSSR. Ser. biial. nav. no.1:119-
127 '57.

(MIRA 10:6)

(HODGKIN'S DISEASE) (BLOOD--ANALYSIS AND CHEMISTRY)
(MINERALS IN THE BODY) (CHILDREN--DISEASES)

ALEYNIKOV, F.K.; PAULAVICHYUS, R.B. [Paulavicius, R.]

Use of ultrathin sections for a direct electron microscope study of the fine structure of glass. Trudy AN Lit. SSR. Ser.8 no.1:7-18 '65.

(MIRA 18:7)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

ALEYNIKOV, F.K.; PAULAVICHYUS, R.B. [Paulavicius, R.]

Determination of the surface tension of glass. Trudy AN Lit. SSR. Ser. B
no.1:19-31 '65. (MIRA 18:7)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.

ALEYNIKOV, F.K.; SLIZHIS, V.A.; PAULAVICHYUS, R.B.; DUNDIS, P.V.

Direct electron microscope study of the fine ~~structure~~ of glass.
Dokl. AN SSSR 141 no.3:674-676 N '61. (MIRA 14:11)

1. Institut khimii i khimicheskoy tekhnologii AN Litovskoy SSR.
Predstavleno akademikom N.V. Belovym.
(Glass)
(Electron microscopy)

L 50543-65 IWP(e)/EWT(m)/EPF(c)/EWP(i)/EPR/EWP(j)/T/EWP(b) Pc-4/Pq-4/
Pr-4/Ps-4 WW/HM/WH

ACCESSION NO: AF5009168

UR/0236/61/000/001/0001/0018

AUTHOR: Aleinikovs, F. (Aleinikov, F. K.), Paulavicius, R. (Paulavichyus, R. B.),
Parfionovas, V. (Parfenov, V. A.)

TITLE: Use of ultrathin sections in a direct electron-microscopic investigation
of the fine structure of glass

SOURCE: AN LitSSR, Trudy. Seriya B. Fiziko-matematicheskiye, khimicheskiye,
geologicheskiye i tekhnicheskiye nauki, no. 1, 1965, 7-18

TOPIC TAGS: electron microscopy, glass microstructure, quartz glass, multiple
component glass, fiberglass, glass heat treatment

ABSTRACT: An electron-microscopic study of ultrathin sections of glass, carried
out by the authors for the first time, made it possible to study the fine struc-
ture of the following glasses: (1) one-component optical quartz glass; (2) two-
component-glasses $\text{Na}_2\text{O} \cdot 5\text{SiO}_2$, $2\text{Na}_2\text{O} \cdot 5\text{SiO}_2$, and $3\text{Na}_2\text{O} \cdot 5\text{SiO}_2$; (3) three-component
glasses $\text{Na}_2\text{O} \cdot \text{BeO} \cdot 5\text{SiO}_2$, $\text{Na}_2\text{O} \cdot \text{SrO} \cdot 5\text{SiO}_2$, $\text{Na}_2\text{O} \cdot \text{BaO} \cdot 5\text{SiO}_2$, $0.5\text{Al}_2\text{O}_3 \cdot 8\text{SiO}_2 \cdot \text{P}_2\text{O}_5$, and
 $\text{Na}_2\text{O} \cdot 9\text{B}_2\text{O}_3 \cdot 15\text{SiO}_2$; and various multicomponent glasses. Fiberglass was also
studied. The results confirmed the hypothesis that the structure of glass is mic-
roinhomogeneous. The experimental data showed that, in accordance with this

Card 1/2

L 50543-65

ACCESSION NR: AP5009168

hypothesis, the glasses contain regions of a low degree of ordering measuring 40 to 150 Å which differ in composition from the glass skeleton. Sodium borosilicate glasses of the composition $\text{Na}_2\text{O} \cdot 9\text{B}_2\text{O}_3 \cdot 15\text{SiO}_2$ consist of two immiscible glass phases (one rich in silica, the other rich in sodium oxide and boron oxide). In the course of heat treatment, the silica-rich phase forms a spongy skeleton in which pores of various sizes are filled with the other phase. It was shown for the first time by electron microscopy that the structure of fiberglass is not oriented, but analogous to that of massive glass. Orig. art. has: 4 figures.

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR (Institute of Chemistry and Chemical Engineering, Academy of Sciences, Lithuanian SSR)

SUBMITTED: 2 May 64

ENCL: 00

SUB CODE: HT, EC

NO REF SOV: 007

OTHER: 00

Card

2/2

1. 30542-65 EMP(e)/ENT(m)/EMP(i)/EMP(h) Pg. 4 WH

ACQUISITION NO: AF3009169

UR/0236/65/000/001/0019/031

AUTHOR: Alsinikovas, V. (Aleynikov, V. K.) Paulavicius, R. (Paulavichyus, R. B.)

TITLE: Determining the surface stresses of glass

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskiye, khimicheskiye, geologicheskiye i tekhnicheskiye nauki, no. 1, 1965, 19-31

TOPIC TAGS: glass strength, glass heat treatment, glass surface stress, glass microcrack

ABSTRACT: This work was carried out in order to develop a new method of determining surface stresses of glass, free from the drawbacks of the optical polarization method and mechanical methods. A relationship was established between stresses arising in glass under the influence of mechanical loads and heat treatment, and the length of microcracks forming on the surface of glass as a result of the action of the indenter of a PMT-3 instrument. The absolute value of the elongation or reduction of microcracks caused by the same compressive or tensile force depends both on the load on the indenter and on the composition of the glass; the relative value, however, does not depend on these factors. On the basis of the experimental data, a nomogram was constructed by means of which, when the relative change of the microcracks is known, it is possible to determine the

L 50542-65

ACCESSION NR: AP5009169

surface tensile stresses (up to 5 kg/mm²) and surface compressive stresses (up to 25 kg/mm²) of any glass or other brittle material. From the change in the length of the microcracks, not only the magnitude and sign but also the direction (vector) of the stresses can be determined. Orig. art. has: 8 figures, 3 tables, and 2 formulas.

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR (Institute of Chemistry and Chemical Technology, Academy of Sciences, Lithuanian SSR)

SUBMITTED: 11 May 64

ENCL: 00

SUB CODE: MT

NO REF SOV: 1/12

C. REF: 000

me
Card 2/2

S/236/62/000/004/003/009
D204/D307

AUTHORS: Slizhis, V. A., Aleynikov, F. K. and Paulavichyus, R.B.

TITLE: The selection of composition for the production of foamed glass

SOURCE: Akademiya nauk Litovskoy SSR. Trudy. Seriya B, no. 4, 1962, 71-76

TEXT: Sheet window glass, bottle glass and laboratory-prepared $\text{SiO}_2\text{-Al}_2\text{O}_3\text{-Fe}_2\text{O}_3\text{-CaO-MgO-Na}_2\text{O-K}_2\text{O}$ glasses were investigated in an effort to reduce the required foaming temperature and therefore lower the costs of this process. The alkali contents of the laboratory glasses were 15 - 17% and 19 - 20%. The specimens were foamed at 620 - 870°C, using 2% (by weight) of north-western Lithuanian limestone from the "Karpenay" deposit as the foaming agent, and their weights by volume were determined as a function of the foaming temperature. It was found that the latter property was considerably raised by small amounts of Al_2O_3 , and was lowered

Card 1/2

The selection of ...

S/236/62/000/004/003/009
D204/D307

by Fe_2O_3 and Na_2O , although large additions of the alkali made the glass hygroscopic. Thus the cheap, Fe-containing bottle glass (from the "Alyalsotas" factory) could be foamed at lower temperatures than the sheet window glass, i.e. at $730 - 830^\circ\text{C}$ with limestone or dolomite, and at $730 - 800^\circ\text{C}$ with coke. At higher temperatures the pores were larger and more uneven. The foaming range could be increased by the addition of CaO and MgO . There are 3 tables.

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR (Institute of Chemistry and Chemical Technology, Academy of Sciences of the Lithuanian SSR)

SUBMITTED: March 24, 1962

Card 2/2

12559

S/236/62/000/002/002/004
E071/E135

AUTHORS:
TITLE:

Aleynikov, F.K., Paulavichyus, R.B., and Sliznis, V.A.
A study of some physico-mechanical properties of
three-component glasses

PERIODICAL: Trudy Akademii nauk Litovskoy SSR, Seriya B, 2(29),
1962, 69-94

TEXT: A systematic investigation was made of the micro-
hardness, microstrength (crack resistance) and brittleness of
glasses of the following compositions: $R_2O \cdot xR_0.5 SiO_2$, where
 $R_2O = Li_2O, Na_2O$ and K_2O ; $R_0 = BeO, MgO, CaO, SrO, CdO, BaO$
and PbO ; $x = 0.5, 1.0, 1.5, 2.0, 2.5, 3.0$. In addition, the
system $xR_2O.5 SiO_2$ and the ternary sodium calcium silicate system
in which the proportions of both sodium and calcium oxide were
varied, was also studied. The glasses investigated were prepared
from very pure components and molten in platinum crucibles. All
glasses were preliminarily annealed for 4 hours at 450-650 °C
depending on composition) and then, after experimental determina-
tion of their softening temperature, were re-annealed for 2 hours
at 10-15 °C below the softening temperature. Glasses which showed

APPROVED FOR RELEASE: 06/15/2000

Card 1/4

A study of some physico-mechanical... S/236/62/000/002/002/004
E071/E135

a tendency to crystallisation were not submitted to the secondary annealing. Two types of specimens were used for the investigations: cylindrical 15-20 mm diameter, 5-15 mm height; and small glass chips 1-4 mm diameter in which no stresses could be detected with a polariscope. The microhardness was determined by means of a diamond pyramid indenter; the microstrength and the brittleness criterion were calculated from the dimensions of the indentations, using the following formulae of N.K. Dertev:

$$R = 4800 \frac{P(1 + 2\mu)}{4d^2 + \rho^2} \quad (2)$$

$$T = 0.61 \left(4 + \frac{\rho^2}{d^2} \right) \left(\frac{1 - 2\mu}{1 + 2\mu} \right) \quad (3)$$

where: R - microstrength in tension, kg/mm²; T - brittleness criterion; P - indenter (load), g; ρ - length of crack at the angles, microns; d - length of the diagonal of the indentation, microns; μ - Poisson coefficient.

According to preliminary experiments on homogeneous optical glass
Card 2/4

A study of some physico-mechanical... S/236/62/000/002/002/004
E071/E135

K-O, residual stresses have no noticeable effect on the length of cracks in the indentations unless they are of the order of 100 $\mu\text{m}/\text{cm}$; the values for some of the synthesised glasses were 10-50 $\mu\text{m}/\text{cm}$. The residual stresses in small glass chips, obtained by thermal cracking or mechanical breaking of large pieces, do not disappear although the polariscope does not show presence of stresses. It was found (using glass $\text{Na}_2\text{O} \cdot \text{CaO} \cdot 5 \text{SiO}_2$) that melting of glass during 2 and 4 hours has no practical influence on its strength characteristics, while a prolonged high temperature annealing lowers the microhardness and increases the resistance to cracking. As a rule, with increasing indenter load (50-150 g) the microhardness of glasses free from traces of crystallisation decreases by 3-8%, the microstrength decreases by 25-35%, but the brittleness criterion increases by 15-20%. Conclusions:
1) As regards their influence on increasing the microhardness, alkali earth oxides can be placed in the following order:
 $\text{BeO} > \text{CaO} > \text{MgO} > \text{SrO} > \text{BaO}$ and $\text{ZnO} > \text{CdO}$; and as regards their influence on the microstrength, in the following order:
 $\text{BeO} > \text{MgO} > \text{CaO} > \text{SrO} > \text{BaO}$ and $\text{ZnO} > \text{CdO}$.

Card 3/4

A study of some physico-mechanical ... S/236/62/000/002/002/004
E071/E135

- 2) Alkali oxides increase the microhardness and microstrength of glasses in the following order: $\text{Li}_2\text{O} > \text{Na}_2\text{O} > \text{K}_2\text{O}$.
 - 3) Alkali oxides lower the brittleness of glasses in the following order: $\text{K}_2\text{O} > \text{Na}_2\text{O} > \text{Li}_2\text{O}$.
 - 4) Glasses of the same microhardness but with lower values of the brittleness criterion are stronger.
 - 5) In the ternary system $\text{Na}_2\text{O}-\text{CaO}-\text{SiO}_2$ the microhardness depends mainly on the proportion of calcium oxide.
- There are 6 figures and 6 tables.

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii
Akademii nauk Litovskoy SSR)
(Institute of Chemistry and Chemical Technology,
AS Lithuanian SSR)

SUBMITTED: November 18, 1961.

Card 4/4

S/236/62/000/002/003/004
EO71/E135

AUTHORS:

Aleynikov, F.K., Dundzis, P.V., Paulavichyus, R.B.,
and Slizhis, V.A.

TITLE:

A direct electronmicroscopic investigation of the fine
structure of di-, tri- and multi-component silicate
glasses

PERIODICAL: Trudy Akademii nauk Litovskoy SSR, Seriya B, 2(29),
1962, 95-108.

TEXT:

In view of the scarcity and some uncertainties of the
results obtained in published investigations, a study of the fine
structure of transparent glasses was undertaken, on the following
types of glass: $\text{Na}_2\text{O} \cdot 5 \text{SiO}_2$, $\text{R}_2\text{O} \cdot x\text{RO} \cdot 5 \text{SiO}_2$ (where $\text{R}_2\text{O} = \text{Li}_2\text{O}$,
 Na_2O , K_2O ; $\text{RO} = \text{BeO}$, MgO , CaO , ZnO , SrO , CdO , BaO , PbO ;
 $x = 0.5, 1.0, 1.5, 2.0, 2.5$ and 3.0) as well as on some multi-
component glasses - ordinary sheet glass, glass electrodes etc.
The development of a suitable method was done using glass of
composition $\text{Na}_2\text{O} \cdot \text{CdO} \cdot 5 \text{SiO}_2$. The electron microscope used had a
resolving power of about $8-10 \text{ \AA}$ (magnification 50-100 thousand).
Initially, carbon replicas with a preliminary shading of a fresh
Card 1/3

A direct electromicroscopic ...

S/236/62/000/002/003/004
E071/E135

glass fracture at an angle of 15-20° with platinum or tungsten oxide were used. These replicas, however, showed their own structure and not that of the glass. Subsequently carbon-platinum replicas were made, applying the method of D.E. Bradley, by spraying a thin platinum-carbon film at an angle of 45° to the surface of the glass. Since this method is very laborious and the replicas can to some extent distort the actual glass structure, a direct method of preparation of glass films for studying the structure was developed. Initially, this consisted in etching thin, polished glass plates (0.2-0.5 mm thick); later blown glass films were used which were subsequently etched in hydrofluoric acid or mixtures of hydrofluoric with another mineral acid, until a necessary thin film was obtained. The experimental procedure is described in some detail. The structure observed directly on a thus prepared specimen of $\text{Na}_2\text{O} \cdot \text{CdO} \cdot 0.5 \text{ SiO}_2$ glass was identical with that observed on the replica prepared by the Bradley method. The specimens prepared by etching showed not only the surface structure of glass, but in some cases the distribution of micrononuniformities in the whole thickness of the glass film. Therefore this method of investigation was used in further studies. It was established

Card 2/3

A direct electronmicroscopic ...

S/236/62/000/002/003/004
E071/E135

that none of the glasses investigated were homogeneous; they consist of a skeleton rich in silica and a multiplicity of microdendrites which depend on the chemical composition of glass as well as on its thermal history and technological factors. The majority of the glasses investigated had microdendrites of an order of 40-100 Å.

There are 4 figures and 1 table.

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii
Akademii nauk Litovskoy SSR
(Institute of Chemistry and Chemical Technology,
AS Lithuanian SSR)

SUBMITTED: December 2, 1961.

Card 3/3

0126

S/020/61/141/003/014/021

B101/B117

15.2510

AUTHORS: Aleynikov, F. K., Slizhis, V. A., Paulavichyus, R. B., and Dundzis, P. V.

TITLE: Direct electron-microscopic examination of the fine structure of glass

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 3, 1961, 674-676

TEXT: Since the structure of replicas disturbs the electron-microscopic examination of glass, the authors developed a method of direct electron-microscopic glass examination. They used a JEM-5V electron microscope. Glass films were obtained from 0.2-0.5 mm thick glass laminas by grinding and polishing, or by blowing the molten glass with subsequent etching. Glass laminas were dissolved in HF until they permitted good penetrability to the electron beam. The laminas were first etched with 20%, then with 10; 4; 2; and 0.5% HF. Blown glass was etched with 4; 2; and 0.5% HF. Distinct fine structures were also obtained by etching with lye. The electron-microscopic examination showed that two-, three-, and multi-component glasses were not homogeneous. [Abstracter's note: electron

Card 1/3

Direct electron-microscopic ...

30726

S/O20/61/141/003/014/021

B101/B117

Type of glass or its composition

Dimensions of microheterogeneities,
A

Window sheet glass
Cover glass

60 - 80
80 - 150

Microinhomogeneities do not only depend on the type of thermal treatment but also on the glass composition. There are 2 figures, 1 table, and 8 references: 6 Soviet and 2 non-Soviet. The reference to the English-language publication reads as follows: I. Warshaw, J. Am. Ceram. Soc., 1, 4 (1960).

ASSOCIATION: Institut khimii i khimicheskoy tekhnologii Akademii nauk LitSSR (Institute of Chemistry and Chemical Technology of the Academy of Sciences Litovskaya SSR)

PRESENTED: May 30, 1961, by N. V. Belov, Academician

SUBMITTED: May 30, 1961

Card 3/3

I 11048-66 EWP(e)/EWK(m)/EWP(b) WH
 ACC NR: AP6000671 44 UR/0236/65/000/002/0097/0109 37
 44 44 63
 AUTHOR: Aleynikov, F.K.; Paulavichyus, R.F.; Parfenov, V.A.;
 Slizhis, V.A.
 ORG: Institute of Chemistry and Chemical Technology AN LitSSR (Institut
 khimii i khimicheskoy tekhnologii AN LitSSR)
 TITLE: Effect of heat treatment⁵ on some physical and mechanical proper-
 ties and on the structure⁵ of silicate glasses⁵⁷⁷. Mechanical properties
 SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskiye, khimiches-
 kiye, geologicheskiye i tekhnicheskiye nauki, no.2, 1965, 97-109
 TOPIC TAGS: silicate glass, glass property, magnesium oxide, calcium
 oxide, zinc oxide, inorganic oxide
 ABSTRACT: A study was made of the effects of high temperature heat
 treatment of window glass and of glasses with a molar ratio of $\text{Na}_2\text{O}-\text{RO}-$
 55SiO_2 , where RO represents beryllium oxide, magnesium oxide, calcium
 oxide, strontium oxide, cadmium oxide, or barium oxide. These effects
 were measured in terms of microhardness, micro-breaking strength, bending
 strength, and elastic state. The samples were subjected to heat treat-
 ment at 550, 650, 800, and 1200°C and were held at these temperatures for
 periods of 3, 6, 12, 50, 100, and 500 hours. Experimental results are
 Cord 1/2

I 11048-66

ACC NR: AP6000671

presented in tabular form. It was found that, while the microhardness within limits of the experimental error is practically independent of heat treatment, the micro-breaking strength and the bending strength for glasses without a tendency toward crystallization increase insignificantly as a function of the heat treatment, while for glasses with a tendency toward crystallization they decrease. It was shown that microbrittleness, as a function of the heat treatment, increases to a greater degree the greater the tendency of the glass toward crystallization. The Poisson coefficient of the glasses, within the limits of experimental error, does not vary as a function of the heat treatment, while the Young modulus and the shear modulus increase insignificantly. In general it is concluded that it is impossible to increase the strength of glasses by prolonged heat treatment. Orig. Art. has: 6 tables.

SUB CODE: 11,07 SUBM DATE: 06Aug64/ ORIG REF: 008/ OTH REF: 004

Card 2/2

L 11046-66 EWP(e)/EWT(m)/EWP(h) WH

ACC NR: AP6000673

UR/0236/65/000/002/0125/0136

AUTHOR: Aleynikov, P.K.; Paulavichyus, R.B.ORG: Institute of Chemistry and Chemical Technology AN LitSSSR (Institut khimii i khimicheskoy tekhnologii AN Lit SSR)TITLE: Effect of heat treatment on some physical and mechanical properties and on the structure of silicate glasses. Structure

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskoye, khimicheskoye, geologicheskoye i tekhnicheskoye nauki, no.2, 1965, 125-136

TOPIC TAGS: silicate glass, crystal structure, glass property, beryllium compound, strontium compound, magnesium compound, zinc compound, calcium compound

ABSTRACT: For the first time, a study by electron microscope methods was made of the fine structure of glasses of the system $\text{Na}_2\text{O}-\text{RO}-5 \text{ SiO}_2$ (where RO represents beryllium oxide, magnesium oxide, calcium oxide, zinc oxide, strontium oxide, cadmium oxide, and barium oxide) and window glass as a function of the duration of heat treatment in the temperature interval from 550 to 800°C. Time of the heat treatment experiments was 3, 6, 12, 50, and 500 hours. The fine structure of the glass was studied

Card 1/2

L 11046-66

ACC NR: AP6000673

by several methods--x-ray scattering at small angles, electron microscope, microscopic, and other methods. It was established that, with long-term heat treatment of the glasses, together with micro-nonhomogeneities of the order of 60-150 A, in glasses with a tendency toward crystallization there are formed aggregates and agglomerates which are the reason for the decreased strength of the glasses (bending strength, micro-breaking strength). Prolonged high temperature heat treatment of glasses which do not have a tendency toward crystallization increases their strength. During heat treatment of these glasses, there is no formation of particles, aggregates or agglomerations of significant size compared with the micro-nonhomogeneities but, on the other hand, there occurs a change in the dimensions of the micro-nonhomogeneities. Orig. art. has: 4 figures.

SUB CODE: 11,07 SUBM DATE: 26Sep64/ ORIG REF: 008/ OTH REF: 000

60
Card 2/2

PAULAVICIUS, A.

Therapeutic physical culture in femoral fractures. Sveik.
apsaug. 8 no. 2:40-43 F'63.

1. Vilniaus I tarybine klinine ligonine. Vyr. gyd. --
V. Bernackis).

*

PAULAVICIUS, A.

Exercise therapy in fractures in the elbow region. Sveik. apsaug.
7 no.6 (78):36-40 Je '62.

1. Gydomosios fizines kulturos metodistas (Vilniaus I tarybine klinine
ligonine. Vyr gyd. — V. Bernackis).
(ELBOW) (EXERCISE THERAPY)

L 01054-66

ACCESSION NR: AT5022333

HU/2052/64/041/003/0329/0330

AUTHOR: Bajusz, Sandor (Budapest); Lazar, Terez (Budapest); Paulsy, Zoltan (Budapest)

TITLE: Anomalous reaction of beta-tert-butyl aspartate

SOURCE: Academiae scientiarum hungaricae. Acta chimica, v. 41, no. 3, 1964, 329-330

TOPIC TAGS: ester, acetic acid, amino acid

Abstract: [English article] Working on a synthesis of eleodisine, the authors reacted the pentapeptide diester carbobenzoxy-Asp(OBu^t)-Ala-Phe-Ile-Gly-OEt and obtained an alkyl monoester identical with the carbobenzoxy-pentapeptide ethyl ester carbobenzoxy-Asp(OH)-Ala-Phe-Ile-Gly-OEt resulting in the reaction between diester under the action of trifluoroacetic acid. The pentapeptide monoester obtained by alkaline saponification could not be split further with trifluoroacetic acid. Orig. art. has 4 formulas.

ASSOCIATION: Research Institute for Pharmaceutical Industry, Budapest

SUBMITTED: 14Jan64

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 000

OTHER: 002

JPRS

Card 1/1 *mlr*

L 17681-66 NM

ACC NR: AT6009221

SOURCE CODE: HU/2502/65/043/002/0147/0148

AUTHOR: Paulay, Zoltan (Budapest); Bajusz, Sandor (Budapest)

17

ORG: Research Institute for Pharmaceutical Chemistry, Budapest

B+1

TITLE: Novel protection for the guanidino group of arginine

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 43, no. 2, 1965, 147-148

TOPIC TAGS: organic synthetic process, amino acid, biochemistry

ABSTRACT: The synthesis of α -carbobenzoxy-G-tert.-butyloxycarbonyl-L-arginine, applying a combination of protection by α -carbobenzoxy and w-tert.-butyloxycarbonyl groups, which is used for the synthesis of peptides containing basic aminoacid residues other than arginine, was reported. This arginine derivative appears suitable for the synthesis of arginine peptides containing basic amino acids.

[JPRS]

SUB CODE: 07, 06 / SUBM DATE: 15Jul64 / OTH REF: 006

Cord

fw
1/1

2

PAULE, B.

PAULE, B. Fulfillment of the hydraulic construction plan. p. 250

Vol. 35, no. 10, Oct. 1956

VODNI HOSPODARSTVI

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

Czechoslovakia/Plant Diseases ... of Cultivated Plants ...

Abs Jour : Ref Zhur-Biol., No 8, 1957, 403

Author : Maulech Cyprin

Inst : Not given

Title : Distribution of Dwarf Root (of Plant) in Middle
and Eastern Slovakia (d. rostrumenye v sredni
i vostochnes Slovaki Karlicovej olcovi ...
nitzy)

Orig Pub : Za vysokou urodu, 1957, 5, No 17, 403-404

Abstract : No abstract

Card 1/1

PAULECH, J.

Distr: 1E20(j)/4E3d

Equilibrium of the liquid-vapor system of isopropyl chloride and allyl chloride. J. Dyky, J. Paulech, and M. Sepráková (Výzkumný ústav petrochemie, Nováky, Czech.). Chem. zpr. 16, 827-83 (1961) (German summary). The vapor pressure of iso-PrCl was measured in the range -1.80 to 83.00° and of allyl chloride (I) from 8.27 to 47.52° . The vapor pressure can be calculated by the least-squares method with equation for iso-PrCl: $\log P^{\text{sat}} = 6.6452 - [947.54/(216.62 + t)]$ with a relative standard error of the estimate $\pm 0.2\%$ and for I: $\log P^{\text{sat}} = 6.6632 - [956.99/(208.60 + t)]$ with an error of $\pm 0.1\%$. The isobaric equil. of the liquid-vapor system of iso-PrCl (I) and I (2) was measured and the relative volatility can be expressed by the equation: $\alpha = (1 + 2.9715 x_1)/(0.6687 + 1.8147 x_1)$ with an error ± 0.0018 , where α indicates the relative volatility y_{2s}/y_{1s} with x_i ($i = 1, 2$) as a mole fraction of liquid components and y_i as a mole fraction of gaseous components. Exptl. results are thermodynamically consistent and the system is almost ideal. Jan Mielec

6
1- (14)
1- (14) (NB)
2

PAULECH, J.

CZECHOSLOVAKIA/Physical Chemistry - Thermodynamics, Thermo-chemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions.

R.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 45955

Author : J. Haspra, J. Paulech

Inst : -

Title : Solubility of Acetylene in Vinyl Acetate.

Orig Pub : Chem prumysl, 1957, 7, No 10, 569-570

Abstract : The solubility of acetylene in vinyl acetate was measured in the range from 0° to 40° under the partial pressure of acetylene on the solution of 760 mm of Hg column. The connection between the Bunsen's solubility factor α (number of volumetric units of gas reduced to normal conditions dissolving in a volumetric unit of the solvent under the pressure of acetylene on the solution equal to 1 atm) and the absolute temperature T can be

Card 1/2

Jozef Paulech

3
A precise electrical manostat. Jozef Paulech (Vysokumny
ustav acetylenoveho chem. Novak, Czech. Chem.
prumysl 8. 387-8(1938).—An elec. manostat is described
which allows an accurate setting of the desired pressure.
Variations in pressure do not exceed 0.1 mm. Hg.
Max Hellmann.

Vapor pressure of butyraldehydes. M. Šepráková, J. Paulsch, and J. Dykyj (Výzkumný ústav acetylen. chem. Nováky, Czech.). *Chem. zvesti* 13, 313-18 (1959) (German summary).—The vapor pressure of butyraldehyde (I) and isobutyraldehyde (II) was measured in the range of 100 mm. Hg to 760 mm. Hg. In this range the dependence of pressure on temp. can be expressed by the Nernst equation $\log P^{\circ} = A - (B/T) + 1.75 \log T + CT$ and are tabulated. The variation of calcd. values from measured ones is for I ± 0.69 mm. Hg and for II ± 0.27 mm. Hg.

Jan Micka

5
4E2C (j)
2.92g (NA)

PALUCH, .

"Vapor pressure of butyraldehyde."

CHEMICKÉ ZPRÁVY, Praha, Czechoslovakia, Vol. 13, No. 5, May 1952.

Monthly List of East European Accessions (EAL), LC, Vol. 8, No. 9, September 1967.

Unclassified.

PAULECH, J.

CZECHOSLOVAKIA/Physical Chemistry - Thermodynamics,
Thermochemistry, Equilibria, Physical-Chemical
Analysis, Phase Transitions.

B-8

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 20604

Author : J. Dykyj, M. Seprakova, J. Paulech.

Inst : -

Title : Physical Properties of Ethylene Glycol and Its Derivatives
II. Vapor Pressure of Alkoxyethanols and Other Derivati-
ves Ethylene Glycol.

Orig Pub : Chem. zvesti, 1957, 11, No 8, 461-466

Abstract : The vapor pressure of $\text{CH}_3(\text{CH}_2)_2\text{OCH}_2\text{CH}_2\text{OH}$, $\text{CH}_3(\text{CH}_2)_3\text{OCH}_2\text{-}$
 CH_2OH , $(\text{CH}_3)_2\text{CHOCH}_2\text{CH}_2\text{OH}$, $(\text{CH}_3)_2\text{CHCH}_2\text{OCH}_2\text{CH}_2\text{OH}$, $\text{CH}_3\text{OCH}_2\text{-}$
 $\text{CH}_2\text{OCH}_2\text{CH}_2\text{OH}$ and $\text{CH}_3\text{COOCH}_2\text{CH}_2\text{OCH}_3$ was measured. The ex-
perimental data follow the equation $\log P (\text{mm}) = A - B/t$ †

Card 1/2

PAULECH, J.

TECHNOLOGY

Periodical CHEMICKÉ ZVESTI. Vol. 12, no. 9, Sept 1958

PAULECH, J.: DYKIJ, J.: KLUCOVSKY, P. Physical properties of ethylene glycol and its derivatives. III. Vapor-liquid equilibrium of binary mixtures. p. 543

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959,
Unclassified.

PAULECH, J.

CZECHOSLOVAKIA / Physical Chemistry. Thermodynamics. B
Thermochemistry. Equilibria. Phase
Transitions. Physico Chemical Analysis.

Abs Jour: Ref Zhur-Khimiya, No 20, 1959, 70728.

Author : Dykyj, J.; Paulech, J.; Kfucovsky, P.

Inst : Not given.

Title : Physical Properties of Ethylene Glycol and its
Derivatives. III. Equilibrium - Liquid-Vapor
- of Binary Mixtures.

Orig Pub: Chem. zvesti, 1958, 12, No 9, 543-557.

Abstract: By a previously described method (RZKhim, 1955,
No. 15, 31216) at atmospheric pressures of 30,
80 and 740 mm, the equilibrium - liquid-vapor -
was investigated in 11 binary mixtures contain-
ing as one of its components ethers or esters
of ethylene glycol: (1) methanolmonomethyl

Card 1/3

PAULECH, J.

Distr: 4E2c(j)

Physical properties of ethylene glycol and its derivatives.
 III. Equilibrium of liquid and gas binary mixtures.⁷ J.
 Dykyj, J. Paulech, and P. Kláček (Výzkumný ústav
 acetylen. chem., Návěky, Czech.). Chem. zvesti 12, 643-
 57(1958)(German summary); cf. C.A. 52, 6877b.—Liquid-
 gas equil. of 11 binary mixts. contg. as 1 component ethers
 or esters of ethylene glycol were measured. With the ex-
 ception of the binary system AcOH plus MeOC₂H₄OAc (I)
 all other systems including EtOH plus EtOC₂H₄OH, meas-
 ured by Baker, *et al.* (C.A. 34, 18⁹) can be well correlated
 with the Norrish and Twigg (C.A. 48, 5582g) equation and
 with the 2- or 3-const. equation of Hala (C.A. 51, 12625b).
 Equil. I can be correlated only with Hala's 4-const. equa-
 tion. Av. deviations between experimentally detd. values
 and calcd. values are approx. the same according to equa-
 tions of N. and T. and of H. H.'s equation is simpler and
 easier to calc. Jan Micka—

6
2 may

SB
1/1

PAULECH, J.

Physical properties of ethylene glycol and its derivatives. 11. Pressure of the alk-oxyethanols and other ethylene glycol derivatives.

P. 461 (Chemické Zvesti. Vol. 11, no. 8, Aug. 1957, Bratislava, Czechoslovakia)

Monthly Index of East European Accessions (FEAI) LC. Vol. 7, no. 2,
February 1958

PAUL ECH, J.

2
Laboratory distillation columns. The evaluation of some packing materials. J. Paulsch and J. Dyci (Viskumy, Univ. acetyl, chem., Nijmegen, Czech.). Chem. week 11, 602-14 (1967) (German summary). Various packing materials for dist. columns were tested and evaluated. The test involved exp. of CCl_4 and CH_4 . Jan Micks

pm

3

1955 SLOVAKIA

PAVLETOVA-KRATKOVA, Katarina; Institute of Experimental Plant Pathology and Entomology, Slovak Academy of Sciences (Výskumný ústav experimentálnej fytopatológie a entomológie Slovenskej akadémie vied), Ivanka pri Dunaji.

"Contribution to the Study of Little Leaf in Apple Trees."

Pravoslava, Bioscopia, Vol. 14, No. 4, 1946, pp. 346 - 351.

Summary: The condition of little leaf caused by virus infection of apple in Slovak apple trees is discussed. Little leaf occurs fairly frequently in Southern Slovakia in apple trees of the Jonathan, Delicious, and Starking type. The symptoms consist of chlorotic, little leaf, necrosis, and drying of shoots and twigs. The disease is not caused by a virus, but by a bacterial infection. Report on spraying with Bordeaux mixture (1% solution in winter, 2% in summer) is given; some improvement is achieved by a treatment with Bordeaux mixture. 5 Pictures, 2 Tables, 17 Western, 1 Czech, 1 Russian references. (Manuscript received 30 Dec 47).

L 31398-66

ACC NR: 1

Source: CZ/0001/65/000/010/001/0766

AUTHOR: --Grabovetski, I. (Engineer; Bratislava); Fabry, Tibor--
 Fabri, -- (Bratislava); Paulen, Jan--Paulen, Ya. (Engineer; Bratislava)
 ORG: Chemical Works, National Enterprise, Works' Research Institute,
 Bratislava
 TITLE: Alkylphenols with longer, branched side chains were studied.
 SOURCE: by Juraja Dimitrova, n.p., zavodny vyskum
 TOPIC TAG: phenol, benzene, sulfonic acid, aluminum chloride, reaction
 temperature, catalyst, alkylphenol, grease

ABSTRACT: The reaction in the presence of catalysts was investigated.
 Benzenesulfonic acid and aluminum chloride were the catalysts used.
 Alkylphenols with longer, branched side chains were studied.
 The influence of the molar ratios of the reacting substances, the
 influence of the amount of the catalyst, of the temperature and
 duration of the reaction upon the yield and quality of the product
 are evaluated. Individual alkylphenols produced by the reaction
 were identified after chromatographic separation. It was not pos-
 sible to produce dodecylphenols without a simultaneous formation
 of lower alkylphenols. It was, however, possible to obtain an 85%
 yield of octylphenol and dodecylphenols in qualities suitable for
 the production of detergents. The yield is mainly a function of the amount of
 the catalyst and the molar ratio of the reacting substances. The authors
 thank Engineer J. Paulen for his help in the chromatographic work. Orig. art. has:
 4 figures and 1 table.

SUB CODE: 07 / SUBM DATE: 1965 / ORG REF: 001 / OTH REF: 002 / SOV REF: 003
 Card 1/1

HRABOVCEKY, I.; PAULEN, J.; NEUBAUER, B.

New information on the gamma isomer isolation from raw hexachloro-
cyclohexane. Chem prir 14 no. 3:342-345 J1 '64.

1. Chemické závody Jurača Dimitrova, Bratislava.

FALCON, H.; PAULESCU, D., candidat in stiinte economice

"Economy, organization, and the planning of socialist industry"
by [conf. univ., cand. st. econom.] M. Livada, [conf. univ.,
cand. st. econom.] P. Vagu, [cand. st. econom.] N. Fulgeanu,
C. Barbulescu, D. Joita, G. Dumitru, M. Fediuc, C. Negulescu,
R. Sergent, V. Diaconu. Pts. 1-3. Reviewed by H. Falcon,
D. Paulescu. Probleme econ 17 no.12:115-120 D '64.

PAULESCU, D., candidat in stiinta economice

Technological specialization in machinery industry. Probleme econ
14 no.8:66-80 Ag '61.

(Machinery industry)

.PAULESCU, D., candidat in stiinta economica

Aspects of the mechanization and automation development in machine
construction. Probleme econ 16 nr.2:76-88 F '63.

PAULESCU, L., candidat in stiinte economice; BALOIU, C.V.

"The Cimpia Turzii Wire Industry" by [cercetator] C.Grinulescu, [cercetator] Gh.Belu, [cercetator] A.Iancu and others. Reviewed by D.Paulescu, C.V.Baloiu. Probleme econ 17 no.3:150-154. Mar 1964.

PAULESCU, D., candidat in stiinte economice

Effective use of basic assets in the machine construction industry.

Probleme econ 14 no.12:52-66 D '61.

(Rumania--Construction industry)

(Industrial management)

S.A.

Sect. A

Nuclear Reactions

539.172.13
5307. (Some investigations of (p, α) reactions on thin
separated O^{16} and N^{14} targets. Techniques and results.
C. MIZUJIMA and R. T. PAULI. *Ark. Fys.*, 4,
259-322 (Paper 13, 1952).
A historical introduction is given and the equipment
used is described in detail. The isotopes were
separated electromagnetically, on to silver target
backing plates. Proportional counters were more
satisfactory than scintillation counters as yield
detectors. α -energies were found by range measure-
ment. Results are given as curves and are discussed
theoretically. An O^{16} resonance at 640 keV and a N^{14}
at 140 keV were found.

S. A.

Set B.

Electronics

621.384.62 517 514
2259. A 1.8 MV accelerator for heavy particles with
analyzing magnet for use in nuclear research. C.
MILLIKOWSKY AND R. T. PAULI. *Arch. Phys.* 4, 287 98
(Paper 12, 1951).

The h.t. set of the Nobel Institute in Stockholm is
described in detail. It consists of a 7-stage cascade
generator, using a 500 c/s supply voltage to reduce
ripple. A 20 Mc/s r.f. ion source is used, giving a
focused proton current of 110 μ A up to 800 keV.
Protons, H^+ , or H^- , are selected at will by a large
deflector magnet, enabling a well-focused beam to be
obtained down to an effective proton energy of 66 keV.
The maximum voltage so far used is 1.1 MV.

J. H. PROBLEIN (R)

CHELLEN, G. [Mallen, G.]; PAULI, V. [Pauli, W.].

On the mathematical structure of Lee's renormalizable field theory.
(from "Dan.Mat.Fys.Medd.," v.30, no.7, 1955). Usp.fiz.nauk 60
no.3:425-444 N '56. (MLRA 10:1)
(Field theory)

Pauli V.L.
USSR/General Biology - General Hydrobiology.

B-6

Abs Jour : Ref Zhur - Biol., No 7, 1958, 28600

Author : Pauli, V.L.

Inst : -

Title : The History of Development of Ecological Relationships
of Sea Organisms to Temperatures and Salinity.

Orig Pub : Tr. Sevastopolsk. biol. st. AN SSSR, 1957, 9, 282-290

Abstract : In discussing questions of evolution of ecological indices, the author proceeds on the basis that life developed at a definite, non-recurrable moment of the world's existence. Further conditions for generation of life conformed with general optimal environments for existence of living matter. The bottom of warm shoals in tropical ocean regions evidently was the initial environment for life. Since the ability to react to changes of external environments, to live in hypo- and hypertonic solutions at high and low temperature, is attained only as a result of evolution,

Card 1/3

PAULI, V.L.

Tanaidacea of the Black Sea. Trudy SBS 8:136-146 '54. (MIRA 11:1)
(Black Sea—Malacostraca)

1. 121, 1 2
~~PAULI, V. E.~~

Biocoenology of brackish water; the problem of the minimum of
species inhabiting brackish waters. Trudy SBS 8:147-156 '54.

(MIRA 11:1)

(Black Sea--Marine biology)

(Azov, Sea of--Marine biology)

PAULI, V.L.

Independently living [nonparasitic] isopods of the Black Sea.

Trudy SBS 8:100-135 '54.

(MIRA 11:1)

(Black Sea—Isopoda)

**Electrochemical constitutive and colloidal structure of
purified dyestuff azo dyes.** W. Pauli and F. Lang. *Monatsh.*
67, 159-161 (1936). Electrolysis of the colloidal dye-
salt of Congo red yielded the exceedingly pure Congo blue
salt (quinonoid form), and Night blue yielded a lilac pink
salt of the dye base. Similar pure quinonoid salts were
prepd. from Congo rubin, Congo carmin G, benzopurpurin
4B and Chicago blue 6B. The variation of cond. with diln.
and temp. was measured to show electrochem. constitutive
changes and variations in the degree of associat. Models
of structures of the various ionic micelles are also proposed.
A. P. Sachs

A. P. Sachs

BC

A-1

Theory of β -disintegration. W. PAULI (Bull. Acad. Sci. U.R.S.S., Sér. Phys., 1933, 145-153).—It is shown that the exact treatment of the Fermi theory of β -disintegration leads to an infinite self-energy for the particles and that the application of the closer approx. of the distortion theory to β -disintegration is not correct. A. J. M.

ADD 11.4 METALLURGICAL LITERATURE CLASSIFICATION

CA

THEORY OF DISINTEGRATION W. Pauli, *Publ. Acad. Sci. U. R. S. S., Classe sci. math. nat., Ser. phys.* 1938, 148-52 in German 1952. Math. S. L. M.

AND S. C. METALLURGICAL LITERATURE CLASSIFICATION

APC

7-1

Theory of β -disintegration. W. Pauli (Bull.
Acad. Sci. U.R.S.S., *Sov. Phys.*, 1930, 148-153). It
is shown that the exact treatment of the Fermi theory
of β -disintegration leads to an infinite self-energy for
the particles and that the application of the closer
approx. of the distortion theory to β -disintegration is
not correct. A. J. M.

ASD-56A METALLURGICAL LITERATURE CLASSIFICATION

SECTION SYMBOLS

COLLECTIONS

SEARCHED INDEXED

DATE

BY

REMARKS

Comparative electrochemical studies of highly purified lyophilic sols. VI. Electrochemistry of sols of alginate acid. W. Paul and L. Sternbach. *Kolloid-Z.* 24, 201, 300 (1968); cf. C. A. 32, 4559. Highly purified sols of alginate acid were prepd. by electrolysis and electro-oxidation and both acidoid and neutral alginate sols were characterized by electrochem. and viscosity measurements. The effect of cautious vs. vigorous prepn. of the sols manifests itself in the formation of a hydrated form with (C₁₁H₁₁O₅) chain members with the acid equiv. 5⁰ = 104. Cond. titration is the best method of detg. 5⁰, which is the ratio (c - ash)/cm, c being concn. in g./l. and cm

the normality of acid at the second break in the titration curve. The alginate acid sols behave like colloidal electrolytes of multivalent character in that the H⁺ activity and degree of disson. measured potentiometrically exceed those measured conductometrically (f_0 greater than f_1). After decompos. of the sols by boiling they exhibit the typical behavior of dil. uni-univalent electrolytes ($f_0 \approx f_1$). The degree of disson. of the acidoid sols attains a const. value on diln. corresponding to a sharp decrease in the chemical disson. const. with decreasing concn., as is the case with sols of other vegetable gums. The significance of a steric hindrance of the atm. of ions of opposite charge in consequence of the increased spacing of the micelles is discussed. This effect decreases with progressive decomposition of the micelles by boiling. An analogous consideration—electrostatic field action increased by steric hindering of ions of opposite charge—applies to alginate sols prepd. from the acidoid sols both with reference to the trend toward constancy of the av. cond. coeff. and to the effect of decompos. of the sol on their limiting values. The change from acidoid to alginate salt sols leads, in consequence of electrostatic repulsion within the mol. and of increased hydration, to decreased flexibility and greater stiffness of the linear colloids and therewith to increased viscosity. By using opposite ions of large vol., such as pyranidone, this behavior of the alginate acid is greatly increased, corresponding to a reduced inactivation. From the trend in disson. const. with diln. of the acidoid sols there results the anticipated linear dependence of the logarithm of the disson. const. on the concn. P. I. H.

PAULI, Wolfgang; GYORGYI, Geza [translator]

The principle of exclusion and quantum mechanics. Fiz
szemle 13 no.12:367-375 D'63.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja (for Gyorgyi).

1st AND 2nd GROUPS

PROCESSES AND PROPERTIES

Max Samoc. Wolfgang PAUL. *Arben Hov* Form 5, 144 (German), 190 5-
(Croatian)(1931). S's scientific work is described. J. KUCURA 2

ASB 514 METALLURGICAL LITERATURE CLASSIFICATION

SECTION 1

SECTION 2

SECTION 3

SECTION 4

SECTION 5

SECTION 6

SECTION 7

SECTION 8

SECTION 9

SECTION 10

SECTION 11

SECTION 12

SECTION 13

SECTION 14

SECTION 15

SECTION 16

SECTION 17

SECTION 18

SECTION 19

SECTION 20

SECTION 21

SECTION 22

SECTION 23

SECTION 24

SECTION 25

SECTION 26

SECTION 27

SECTION 28

SECTION 29

SECTION 30

SECTION 31

SECTION 32

SECTION 33

SECTION 34

SECTION 35

SECTION 36

SECTION 37

SECTION 38

SECTION 39

SECTION 40

SECTION 41

SECTION 42

SECTION 43

SECTION 44

SECTION 45

SECTION 46

SECTION 47

SECTION 48

SECTION 49

SECTION 50

SECTION 51

SECTION 52

SECTION 53

SECTION 54

SECTION 55

SECTION 56

SECTION 57

SECTION 58

SECTION 59

SECTION 60

SECTION 61

SECTION 62

SECTION 63

SECTION 64

SECTION 65

SECTION 66

SECTION 67

SECTION 68

SECTION 69

SECTION 70

SECTION 71

SECTION 72

SECTION 73

SECTION 74

SECTION 75

SECTION 76

SECTION 77

SECTION 78

SECTION 79

SECTION 80

SECTION 81

SECTION 82

SECTION 83

SECTION 84

SECTION 85

SECTION 86

SECTION 87

SECTION 88

SECTION 89

SECTION 90

SECTION 91

SECTION 92

SECTION 93

SECTION 94

SECTION 95

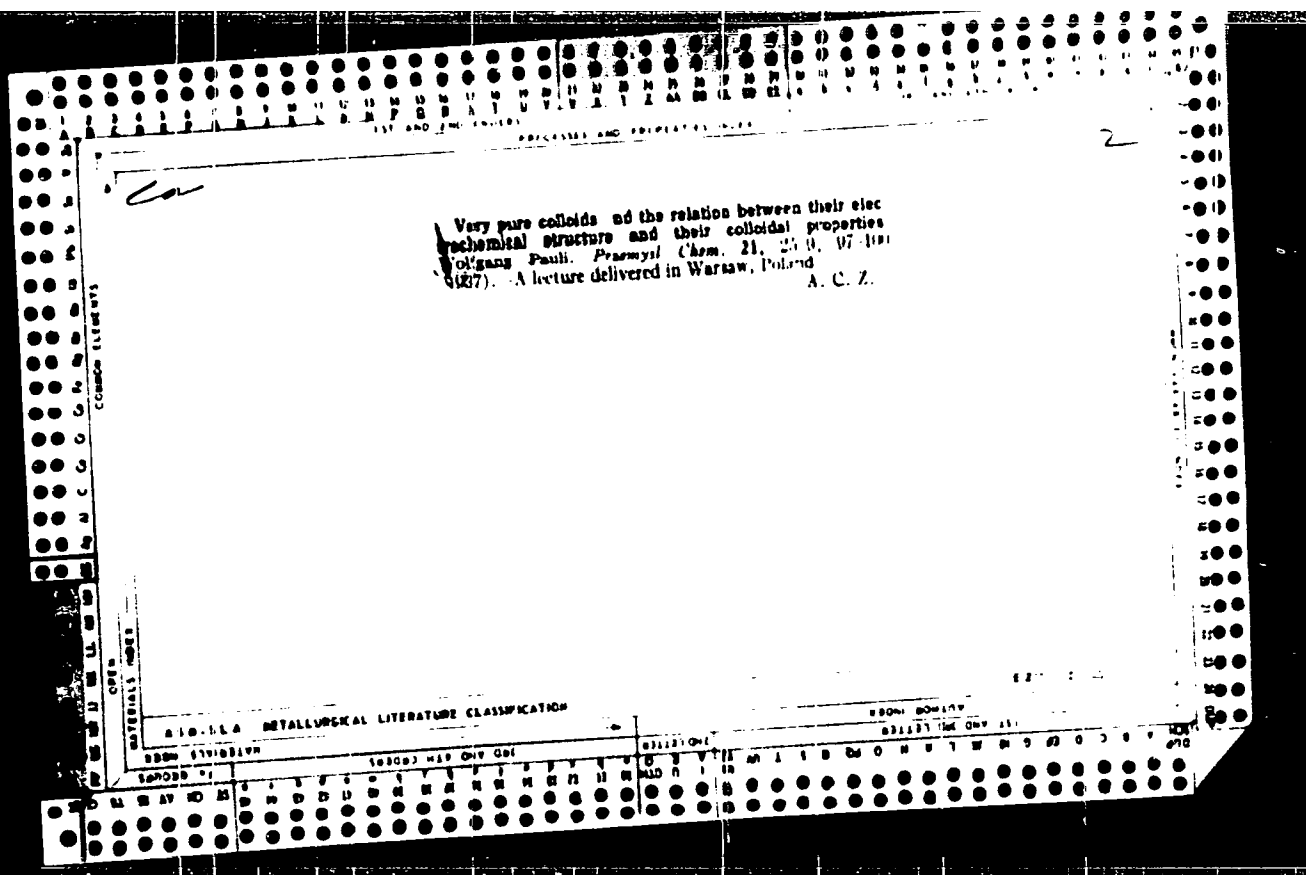
SECTION 96

SECTION 97

SECTION 98

SECTION 99

SECTION 100



1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSING AND PROPERTY NOTES																																																			
BC Autonomic imbalance in hemiplegia. D. PAULIAN, I. BISTRICIANU, and C. FORTUNESCU (Arch. Neurol. Bucarest, 1959, 3, 68-70).—Differences in blood pressure, sweating, dermographia, and pilomotor response were observed between the normal and abnormal sides in both flaccid and spastic hemiplegias. W. K. S.																																																			
ASD-5.4.4. DETAIL LITERATURE CLASSIFICATION																																																			
SOURCE INFORMATION																										CLASSIFICATION																									
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26.																										1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26.																									

PAULIS, RALPH, eng., correspondent

Testing modern manufacturing assembly lines. Constr Buc
16 no.754:1 20 1964.

N. PAULIC

"Navigation Vessels as a Means of Transporting Naphtha Derivatives. n. 190,
Prospects for Naphtha in Montenegro. n. 190" (NAFTA, Vol. . No. 6,
June 1953, Zagreb, Yugoslavia)

30: Monthly List of East European Accessions, L.C., Vol. 2, No. 11,
Nov. 1953, Un 1.

PAULICEK, Josef; ZAPOROZEC, Alexandr, promovany geolog

APPROVED FOR RELEASE: 06/15/2000 **CIA-RDP86-00513R001239510012-7"**

Separation of casing strings in boreholes. Geol pruzkum t
no.5:149 My '64.

1. Geologicky pruzkum National Enterprise, Prague.

PAULICEK, R.; FAJBER, J.

Fast hardening mixtures with water glass. Slevarenstvi
10 no.9:342-345 S '62.

1. Turcianske strojarno, Martin.

PAULICEK, R.; KLAT, Fr.; KOREJCIC, M.

Problem of inclusion in castings cast in CT mixture.
Slevarenstvi 11 no.11:478-479 N'63.

1. Turcanske strojarne, Martin (for paulicek).
2. Zbarske strojirny a slevarny, Zdar nad Sazavou (for Klat and Korejcik).

PAULICEK, Rudolf

Modeling the mechanism of scab formation in bentonite molding mixtures. Slevarenstvi 12 no.11:477-480 N '64.

1. Turcianske strojarne National Enterprise, Martin.

PAULICEK, R.; PAVOLKO, O.; VOLAVKA, L.; MARTINAK, V.

Technology of founding of locomotive wheel disks and their finishing.
Slevarenstvi 10 no.1:29-30 Ja '62.

1. ZIVS Martin.

PAULICEK, Rudolf

Casting of attachments to the CTU 3000 press in forming mixture with dense water glass. Slevarenstvi 11 no.1:13-15 Ja '63.

1. Turcanske strojarne, Martin.

PAULICKA, I.

Emergency scheme of the research center of the Associated
Electrical Industries in Aldermastone. Jaderna energie 8
no.7:254-255 JI '62.

PAULICKA, I.

Symposium on the use of research reactors in Vienna. Jaderna
energie 8 no.7:258 J1 '62.

PAULICKA, I.

Importance of meteorological conditions in the selection of
location for nuclear power stations Jadrna energie 10
no. 5:176-179 My '64.

PAULICKA, I.

Starting the operation of the Elk River, Hallam and Piqua
nuclear power plants. Jaderna energie 10 no.3:305-306 Ag "64.

PAULICKA, I.

Conference of the International Atomic Energy Agency on
experience in operation of power reactors. Jaderna energie
9 no.10:337-339 0 '63.

PAULICKA, Ivan

Industrial utilization of radioisotopes in Sweden.
Jaderna energie 9 no. 12:392-393 D '63.

1. Jaderna elektraren, n.p., Jaslovske Bohunice.

CERENSKA, E., dr.; PAULICKOVA, M.; SMYD, B., dr.

New buildings of social security institutes. Soc revue 7 no.6:
273-283 '61.

CERENSKA, Edita, dr.; PAULICKOVA, Marie; SMYD, Bohumir, dr.

New buildings of social security institutes. Soc revue 7 no.5:
227-235 '61.

1. Statni urad socialniho zabezpeceni.

(Insurance, Social)

MATKOVIC, Jelka; WEBER, K.; FLES, D.; PAULIC, Nevenka

On inhibitory properties of oximes. 1. Action of oximes on the chemi-luminescence of luminol. Arh hig rada 11 no.3:177-202 '60.

1. Institut za medicinska istrazivanja i medicinu rada Jugoslavenske akademije znanosti i umjetnosti, Zagreb.

(HYDROXYLAMINES chemistry) (LUMINESCENCE)
(HETEROCYCLIC COMPOUNDS chemistry)

116

ca

PROCESSING AND PREPARATION AREA

116

THE ROLE OF THE RETICULO-ENDOTHELIAL SYSTEM IN THE PRODUCTION OF FIBRINOGEN. Antal Leisher and László Paulásky. Magyar Orvosi Arch 94, 512-18 (1941). The first dose of carmine injected into rabbits caused an increase of fibrin, while subsequent doses diminished it. The effect is suggested to be due to an irritation of the reticulo-endothelial system. Henry Taitler

ASD SLA DETAILING LITERATURE CLASSIFICATION

116

CA

114

7 The role of the reticulo-endothelial system in the production of fibrinogen. Antel Leisher and Louis Pauliksky. *Mayer Green Arch.* 24, 412-10 (1934). The first dose of carbimide injected into rabbits caused an increase of fibrin, while subsequent doses diminished it. The effect is suggested to be due to an irritation of the reticulo-endothelial system. Henry Tauber.

ASD 11A METALLURGICAL LITERATURE CLASSIFICATION

SECTION ONE

SECTION TWO

SECTION THREE

SECTION FOUR

SECTION FIVE

SECTION SIX

SECTION SEVEN

SECTION EIGHT

SECTION NINE

SECTION TEN

SECTION ELEVEN

SECTION TWELVE

SECTION THIRTEEN

SECTION FOURTEEN

SECTION FIFTEEN

SECTION SIXTEEN

SECTION SEVENTEEN

SECTION EIGHTEEN

SECTION NINETEEN

SECTION TWENTY

SECTION TWENTY ONE

SECTION TWENTY TWO

SECTION TWENTY THREE

SECTION TWENTY FOUR

SECTION TWENTY FIVE

SECTION TWENTY SIX

SECTION TWENTY SEVEN

SECTION TWENTY EIGHT

SECTION TWENTY NINE

SECTION THIRTY

SECTION THIRTY ONE

SECTION THIRTY TWO

SECTION THIRTY THREE

SECTION THIRTY FOUR

SECTION THIRTY FIVE

SECTION THIRTY SIX

SECTION THIRTY SEVEN

SECTION THIRTY EIGHT

SECTION THIRTY NINE

SECTION FORTY

SECTION FORTY ONE

SECTION FORTY TWO

SECTION FORTY THREE

SECTION FORTY FOUR

SECTION FORTY FIVE

SECTION FORTY SIX

SECTION FORTY SEVEN

SECTION FORTY EIGHT

SECTION FORTY NINE

SECTION FIFTY

SECTION FIFTY ONE

SECTION FIFTY TWO

SECTION FIFTY THREE

SECTION FIFTY FOUR

SECTION FIFTY FIVE

SECTION FIFTY SIX

SECTION FIFTY SEVEN

SECTION FIFTY EIGHT

SECTION FIFTY NINE

SECTION SIXTY

SECTION SIXTY ONE

SECTION SIXTY TWO

SECTION SIXTY THREE

SECTION SIXTY FOUR

SECTION SIXTY FIVE

SECTION SIXTY SIX

SECTION SIXTY SEVEN

SECTION SIXTY EIGHT

SECTION SIXTY NINE

SECTION SEVENTY

SECTION SEVENTY ONE

SECTION SEVENTY TWO

SECTION SEVENTY THREE

SECTION SEVENTY FOUR

SECTION SEVENTY FIVE

SECTION SEVENTY SIX

SECTION SEVENTY SEVEN

SECTION SEVENTY EIGHT

SECTION SEVENTY NINE

SECTION EIGHTY

SECTION EIGHTY ONE

SECTION EIGHTY TWO

SECTION EIGHTY THREE

SECTION EIGHTY FOUR

SECTION EIGHTY FIVE

SECTION EIGHTY SIX

SECTION EIGHTY SEVEN

SECTION EIGHTY EIGHT

SECTION EIGHTY NINE

SECTION NINETY

SECTION NINETY ONE

SECTION NINETY TWO

SECTION NINETY THREE

SECTION NINETY FOUR

SECTION NINETY FIVE

SECTION NINETY SIX

SECTION NINETY SEVEN

SECTION NINETY EIGHT

SECTION NINETY NINE

SECTION ONE HUNDRED

SECTION ONE HUNDRED ONE

SECTION ONE HUNDRED TWO

SECTION ONE HUNDRED THREE

SECTION ONE HUNDRED FOUR

SECTION ONE HUNDRED FIVE

SECTION ONE HUNDRED SIX

SECTION ONE HUNDRED SEVEN

SECTION ONE HUNDRED EIGHT

SECTION ONE HUNDRED NINE

SECTION TWO HUNDRED

SECTION TWO HUNDRED ONE

SECTION TWO HUNDRED TWO

SECTION TWO HUNDRED THREE

SECTION TWO HUNDRED FOUR

SECTION TWO HUNDRED FIVE

SECTION TWO HUNDRED SIX

SECTION TWO HUNDRED SEVEN

SECTION TWO HUNDRED EIGHT

SECTION TWO HUNDRED NINE

SECTION THREE HUNDRED

SECTION THREE HUNDRED ONE

SECTION THREE HUNDRED TWO

SECTION THREE HUNDRED THREE

SECTION THREE HUNDRED FOUR

SECTION THREE HUNDRED FIVE

SECTION THREE HUNDRED SIX

SECTION THREE HUNDRED SEVEN

SECTION THREE HUNDRED EIGHT

SECTION THREE HUNDRED NINE

SECTION FOUR HUNDRED

SECTION FOUR HUNDRED ONE

SECTION FOUR HUNDRED TWO

SECTION FOUR HUNDRED THREE

SECTION FOUR HUNDRED FOUR

SECTION FOUR HUNDRED FIVE

SECTION FOUR HUNDRED SIX

SECTION FOUR HUNDRED SEVEN

SECTION FOUR HUNDRED EIGHT

SECTION FOUR HUNDRED NINE

SECTION FIVE HUNDRED

SECTION FIVE HUNDRED ONE

SECTION FIVE HUNDRED TWO

SECTION FIVE HUNDRED THREE

SECTION FIVE HUNDRED FOUR

SECTION FIVE HUNDRED FIVE

SECTION FIVE HUNDRED SIX

SECTION FIVE HUNDRED SEVEN

SECTION FIVE HUNDRED EIGHT

SECTION FIVE HUNDRED NINE

SECTION SIX HUNDRED

SECTION SIX HUNDRED ONE

SECTION SIX HUNDRED TWO

SECTION SIX HUNDRED THREE

SECTION SIX HUNDRED FOUR

SECTION SIX HUNDRED FIVE

SECTION SIX HUNDRED SIX

SECTION SIX HUNDRED SEVEN

SECTION SIX HUNDRED EIGHT

SECTION SIX HUNDRED NINE

SECTION SEVEN HUNDRED

SECTION SEVEN HUNDRED ONE

SECTION SEVEN HUNDRED TWO

SECTION SEVEN HUNDRED THREE

SECTION SEVEN HUNDRED FOUR

SECTION SEVEN HUNDRED FIVE

SECTION SEVEN HUNDRED SIX

SECTION SEVEN HUNDRED SEVEN

SECTION SEVEN HUNDRED EIGHT

SECTION SEVEN HUNDRED NINE

SECTION EIGHT HUNDRED

SECTION EIGHT HUNDRED ONE

SECTION EIGHT HUNDRED TWO

SECTION EIGHT HUNDRED THREE

SECTION EIGHT HUNDRED FOUR

SECTION EIGHT HUNDRED FIVE

SECTION EIGHT HUNDRED SIX

SECTION EIGHT HUNDRED SEVEN

SECTION EIGHT HUNDRED EIGHT

SECTION EIGHT HUNDRED NINE

SECTION NINE HUNDRED

SECTION NINE HUNDRED ONE

SECTION NINE HUNDRED TWO

SECTION NINE HUNDRED THREE

SECTION NINE HUNDRED FOUR

SECTION NINE HUNDRED FIVE

SECTION NINE HUNDRED SIX

SECTION NINE HUNDRED SEVEN

SECTION NINE HUNDRED EIGHT

SECTION NINE HUNDRED NINE

SECTION TEN HUNDRED

SECTION TEN HUNDRED ONE

SECTION TEN HUNDRED TWO

SECTION TEN HUNDRED THREE

SECTION TEN HUNDRED FOUR

SECTION TEN HUNDRED FIVE

SECTION TEN HUNDRED SIX

SECTION TEN HUNDRED SEVEN

SECTION TEN HUNDRED EIGHT

SECTION TEN HUNDRED NINE

SECTION ELEVEN HUNDRED

SECTION ELEVEN HUNDRED ONE

SECTION ELEVEN HUNDRED TWO

SECTION ELEVEN HUNDRED THREE

SECTION ELEVEN HUNDRED FOUR

SECTION ELEVEN HUNDRED FIVE

SECTION ELEVEN HUNDRED SIX

SECTION ELEVEN HUNDRED SEVEN

SECTION ELEVEN HUNDRED EIGHT

SECTION ELEVEN HUNDRED NINE

SECTION TWELVE HUNDRED

SECTION TWELVE HUNDRED ONE

SECTION TWELVE HUNDRED TWO

SECTION TWELVE HUNDRED THREE

SECTION TWELVE HUNDRED FOUR

SECTION TWELVE HUNDRED FIVE

SECTION TWELVE HUNDRED SIX

SECTION TWELVE HUNDRED SEVEN

SECTION TWELVE HUNDRED EIGHT

SECTION TWELVE HUNDRED NINE

SECTION THIRTEEN HUNDRED

SECTION THIRTEEN HUNDRED ONE

SECTION THIRTEEN HUNDRED TWO

SECTION THIRTEEN HUNDRED THREE

SECTION THIRTEEN HUNDRED FOUR

SECTION THIRTEEN HUNDRED FIVE

SECTION THIRTEEN HUNDRED SIX

SECTION THIRTEEN HUNDRED SEVEN

SECTION THIRTEEN HUNDRED EIGHT

SECTION THIRTEEN HUNDRED NINE

SECTION FOURTEEN HUNDRED

SECTION FOURTEEN HUNDRED ONE

SECTION FOURTEEN HUNDRED TWO

SECTION FOURTEEN HUNDRED THREE

SECTION FOURTEEN HUNDRED FOUR

SECTION FOURTEEN HUNDRED FIVE

SECTION FOURTEEN HUNDRED SIX

SECTION FOURTEEN HUNDRED SEVEN

SECTION FOURTEEN HUNDRED EIGHT

SECTION FOURTEEN HUNDRED NINE

SECTION FIFTEEN HUNDRED

SECTION FIFTEEN HUNDRED ONE

SECTION FIFTEEN HUNDRED TWO

SECTION FIFTEEN HUNDRED THREE

SECTION FIFTEEN HUNDRED FOUR

SECTION FIFTEEN HUNDRED FIVE

SECTION FIFTEEN HUNDRED SIX

SECTION FIFTEEN HUNDRED SEVEN

SECTION FIFTEEN HUNDRED EIGHT

SECTION FIFTEEN HUNDRED NINE

SECTION SIXTEEN HUNDRED

SECTION SIXTEEN HUNDRED ONE

SECTION SIXTEEN HUNDRED TWO

SECTION SIXTEEN HUNDRED THREE

SECTION SIXTEEN HUNDRED FOUR

SECTION SIXTEEN HUNDRED FIVE

SECTION SIXTEEN HUNDRED SIX

SECTION SIXTEEN HUNDRED SEVEN

SECTION SIXTEEN HUNDRED EIGHT

SECTION SIXTEEN HUNDRED NINE

SECTION SEVENTEEN HUNDRED

SECTION SEVENTEEN HUNDRED ONE

SECTION SEVENTEEN HUNDRED TWO

SECTION SEVENTEEN HUNDRED THREE

SECTION SEVENTEEN HUNDRED FOUR

SECTION SEVENTEEN HUNDRED FIVE

SECTION SEVENTEEN HUNDRED SIX

SECTION SEVENTEEN HUNDRED SEVEN

SECTION SEVENTEEN HUNDRED EIGHT

SECTION SEVENTEEN HUNDRED NINE

SECTION EIGHTEEN HUNDRED

SECTION EIGHTEEN HUNDRED ONE

SECTION EIGHTEEN HUNDRED TWO

SECTION EIGHTEEN HUNDRED THREE

SECTION EIGHTEEN HUNDRED FOUR

SECTION EIGHTEEN HUNDRED FIVE

SECTION EIGHTEEN HUNDRED SIX

SECTION EIGHTEEN HUNDRED SEVEN

SECTION EIGHTEEN HUNDRED EIGHT

SECTION EIGHTEEN HUNDRED NINE

SECTION NINETEEN HUNDRED

SECTION NINETEEN HUNDRED ONE

SECTION NINETEEN HUNDRED TWO

SECTION NINETEEN HUNDRED THREE

SECTION NINETEEN HUNDRED FOUR

SECTION NINETEEN HUNDRED FIVE

SECTION NINETEEN HUNDRED SIX

SECTION NINETEEN HUNDRED SEVEN

SECTION NINETEEN HUNDRED EIGHT

SECTION NINETEEN HUNDRED NINE

SECTION TWENTY HUNDRED

SECTION TWENTY HUNDRED ONE

SECTION TWENTY HUNDRED TWO

SECTION TWENTY HUNDRED THREE

SECTION TWENTY HUNDRED FOUR

SECTION TWENTY HUNDRED FIVE

SECTION TWENTY HUNDRED SIX

SECTION TWENTY HUNDRED SEVEN

SECTION TWENTY HUNDRED EIGHT

SECTION TWENTY HUNDRED NINE

SECTION TWENTY ONE HUNDRED

SECTION TWENTY ONE HUNDRED ONE

SECTION TWENTY ONE HUNDRED TWO

SECTION TWENTY ONE HUNDRED THREE

SECTION TWENTY ONE HUNDRED FOUR

SECTION TWENTY ONE HUNDRED FIVE

SECTION TWENTY ONE HUNDRED SIX

SECTION TWENTY ONE HUNDRED SEVEN

SECTION TWENTY ONE HUNDRED EIGHT

SECTION TWENTY ONE HUNDRED NINE

SECTION TWENTY TWO HUNDRED

SECTION TWENTY TWO HUNDRED ONE

SECTION TWENTY TWO HUNDRED TWO

SECTION TWENTY TWO HUNDRED THREE

SECTION TWENTY TWO HUNDRED FOUR

SECTION TWENTY TWO HUNDRED FIVE

SECTION TWENTY TWO HUNDRED SIX

SECTION TWENTY TWO HUNDRED SEVEN

SECTION TWENTY TWO HUNDRED EIGHT

SECTION TWENTY TWO HUNDRED NINE

SECTION TWENTY THREE HUNDRED

SECTION TWENTY THREE HUNDRED ONE

SECTION TWENTY THREE HUNDRED TWO

SECTION TWENTY THREE HUNDRED THREE

SECTION TWENTY THREE HUNDRED FOUR

SECTION TWENTY THREE HUNDRED FIVE

SECTION TWENTY THREE HUNDRED SIX

SECTION TWENTY THREE HUNDRED SEVEN

SECTION TWENTY THREE HUNDRED EIGHT

SECTION TWENTY THREE HUNDRED NINE

SECTION TWENTY FOUR HUNDRED

<

PAULIG, Karl

Financial system of the German Democratic Republic. Fin. SSSR 19
no.10:72-80 0 '58. (MIRA 11:11)

1. Nachal'nik Byudzhetnogo upravleniya Ministerstva finansov
Germanskoy Demokraticheskoy Respubliki.
(Germany, East--Finance)

HUNGARY / Physical Chemistry. Thermodynamics. Thermo- P
chemistry, Equilibriums, Phys. Chem. Analysis,
Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 52927.

Author : Erden, Paulik, Paulik.
Inst : Akad. Kem.
Title : Differential Thermogravimetry.

Orig Pub: Magyar tud. akad. Kem. tud. oszt. kosl, 1958, 7,
No 1, 55-89, Hozzaszolasok, 90.

Abstract: A method of differential thermogravimetry (DTG)
is described which is carried out by means of a
device recording simultaneously a curve of the
weight loss in respect to the temperature and its

Card 1/4

HUNGARY/Analytical Chemistry. Inorganic Analysis.

Abs Jour: Ref. Zhur-Khimiya, No 12, 1958, 39340.

Author : Erdei, Ban'yan, Paulik.

Inst : Not given.

Title : The Use of the Exchange Precipitation Reactions in Analytical Chemistry.

Orig Pub: Magyar tud. akad. Kem. tud. oszt. K6zl., 1957, 9, No 1, 103-112.

Abstract: The theory of the reaction, $\text{Hg}(\text{IO}_3)_2 + 2\text{HCl} \rightleftharpoons \text{HgCl}_2 + 2\text{IO}_3^-$, was studied. The reaction is used for the de-termination of Cl^- (see: Ref. Zh. Khim, 1954, 36422). The optimum conditions of the reaction course were established. The solubility of $\text{Hg}(\text{IO}_3)_2$ in the presence of various solutions (ethyl alcohol, alkalies, acids)

12

Card : 1/3

HUNGARY/Analytical Chemistry. Inorganic Analysis.

Abs Jour: Ref. Zhur.-Khimiya, No 12, 1958, 39340.

E

was determined. The minimum solubility of $\text{Hg}(\text{IO}_3)_2$ is observed in the presence of ethyl alcohol. The course of the above-mentioned reaction depends upon side reactions, with the formation of complexes HgCl^+ , HgCl_2 and HgCl_3^- . It was shown theoretically, and confirmed experimentally, the possibility of determining Cl^- in concentrations of 3-6mM/l, with accuracy of $\pm 1\%$. At $> 6\text{mM/l}$ of Cl^- , HgCl_3^- is formed, whereas at 3mM/l, HgCl^+ is formed, as a result of which, the amount of IO_3^- being set free is changed. The analysis is carried out only in a neutral medium (methyl orange indicator). The sample weight is chosen in such a way as to use 9 to 18 ml of 0.1N sodium thiosulfate (for 50# ml of solution) for the iodometric titration of IO_3^- . 5ml of 10% potassium nitrate is added to the solution being

Card : 2/3

13

HUNGARY/Analytical Chemistry. Inorganic Analysis.

E

Abs Jour: Ref. Zhur.-Khimiya, No 12, 1958, 39340.

analyzed in order to improve the filtration of the excess $Hg(10_3)_4$. A microdetermination of chloride ions is also possible. In this case, to the 5-8 ml sample of the solution being analyzed there is added an excess of the $Hg(10_3)_4$ suspension, 0.5ml of 0.1% potassium nitrate solution and 10ml of 96% ethyl alcohol. The solution is diluted with water to 20ml. It is possible to determine 0.30-0.75mm/1 of chloride ions in the presence of ethyl alcohol with an accuracy of $\pm 5\%$. The exchange reaction of Br^- , CN^- and I^- proceeds similarly. Cf. Ref. Zh. Khim., 1957, 8534; 1958, 28482.

Card : 3/3

14

PAULIK, P.

Distr: hE2c(j)

23. Precipitate exchange reactions in analytical chemistry, IV*. (In German) L. Erdelyi, R. Bányai, P. Paulik. *Acta Chimica Academiae Scientiarum Hungaricae*, Vol. 13, 1958, No. 3-4, pp. 453-463, 8 tabs.

4
2-may
1

Subsequent to the theoretic discussion of the exchange of chloride by mercury(II) iodate the practical conditions of the method of determination on this basis are discussed. Between certain limits of concentration the main reaction between mercury iodate and chloride ions proceeds without any side reactions. However in solutions of higher concentration a $HgCl_3^-$ complex whereas in solutions of lower concentration a $HgCl_2$ complex forms in addition to $HgCl_2$. The formation of the $HgCl_3^-$ complex liberated less iodate and that of the $HgCl_2$ complex, in turn, more iodate than expected on the basis of the main reaction. The determination of chloride may be carried out also on a micro scale in the presence of alcohol and under adequate conditions. Bromide, iodide and cyanide ions may be similarly determined in this way.

RB
11

OK

ERDEY, L., prof. (Budapest XI., Gellert ter 4); LIPFAY, G. (Budapest XI., Gellert ter 4); GAL, S. (Budapest XI., Gellert ter 4); PAULIN, R., (Budapest XI., Gellert ter 4)

Derivatographic investigation of ammonium phosphate precipitations.
Periodica polytechn chem 5 no.3:209-217 '61.

1. Lehrstuhl für Allgemeine Chemie, Technische Universität.

ERDEY, L., prof. (Budapest XI., Gellert ter 4); LIPTAY, G. (Budapest XI., Gellert ter 4); GAL, S. (Budapest XI., Gellert ter 4); PAULIK, F. (Budapest XI., Gellert ter 4)

Thermal investigation of iron (III) hydroxy precipitations.
Periodica polytechnica 5 no.4:287-303 '61.

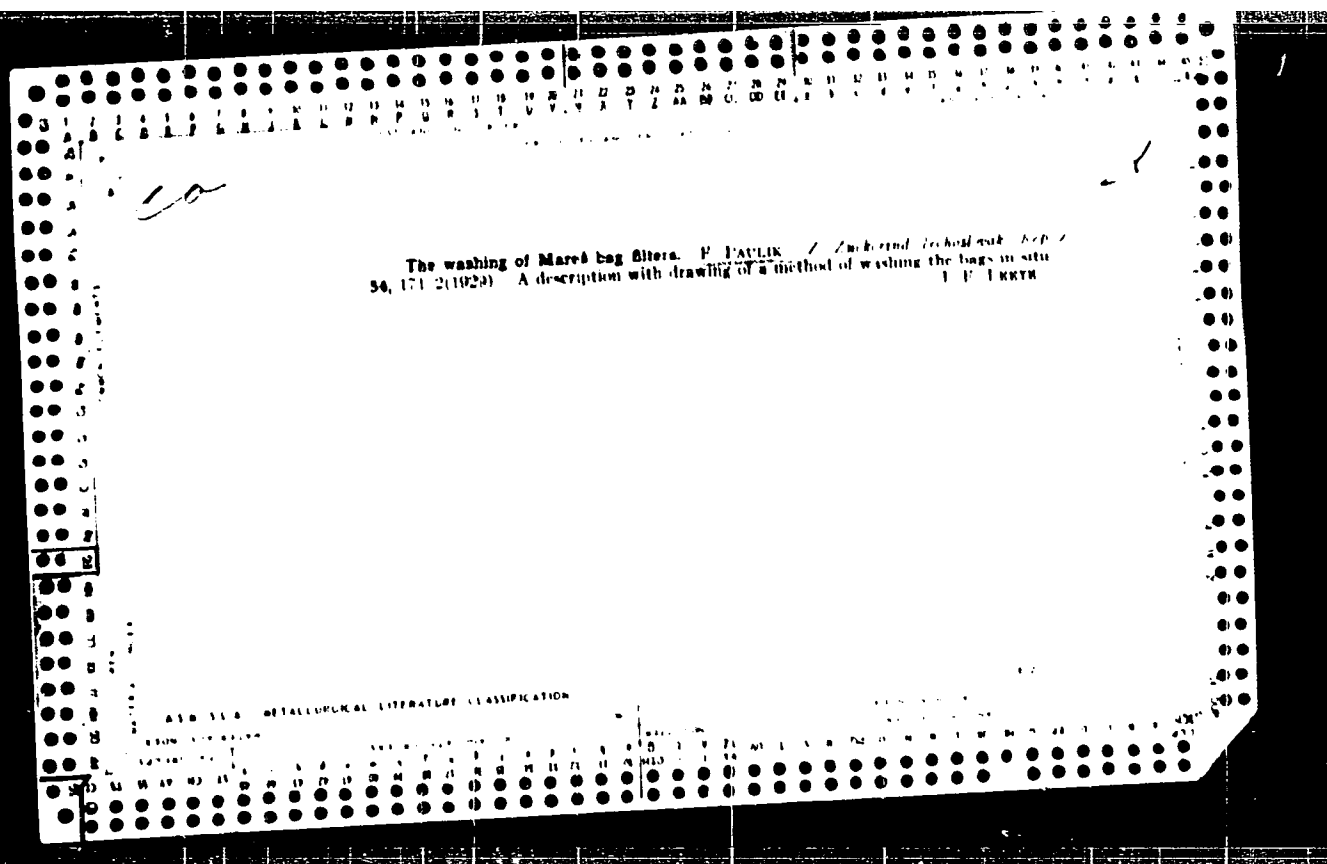
1. Lehrstuhl für Allgemeine Chemie, Technische Universität, Budapest. 2. Editorial board member, "Periodica Polytechnica; Chemical Engineering" (for Erdey).

PAULIK, F.

Derivatography: measuring thermal weight changes, the velocity of weight changes, and the heat-change content. p. 92.

MERES ES AUTOMATIKA. (Merestechnikai es Automatizalasi Tudomanyos Egyesulet) Budapest, Hungary, Vol. 7, no. 4/5, 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.



117 AND 118, CHERRY

PROCEEDINGS AND PROSPECTIVE INDEX

119 AND 120, CHERRY

BC

III 2

Thin-plate filtration through wood wool. F.
Pavlin (J. Sankovskii, Charkovsk., 1904, 22, 175-
176).—Thick juice at 80–90° was filtered through
Dach's filter in which, top and bottom, had been placed
a pair of perforated plates holding between them a
layer of fine pine wood wool. Even in the raw sugar
factory this was found to be worth while, a more regular
juice crystallizing in the pan from the clear syrup than
obtained.

J. P. O.

ADD-51A METALLURGICAL LITERATURE CLASSIFICATION

BROWN STATIONERY

BRISTOL THE NEW LTD

L 63677-63

ACCESSION NR: AT5021747

HU/2502/64/041/01-/0109/0122

AUTHOR: Erdey, Laszlo (Erdei, L.)(Doctor, Professor)(Budapest); Paulik, Ferenc;
Buzach-Gere, Eva (Buzag, E.)Budapest); Polos, Laszlo (Polosh, L.)

TITLE: Derivatographic and electron-microscopic examination of barium sulfate precipitates. Part 2

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no. 1-2, 1954, 109-122

TOPIC TAGS: chemical precipitation, barium compound, sulfate, electron microscopy

ABSTRACT: Barium sulfate precipitates obtained in various analytical precipitations were examined by derivatography and electron microscopy. Pure barium sulfate was obtained only from very dilute solutions even after all volatile impurities were eliminated by calcination. Eighteen electron micrographs and 9 derivatographic curves were presented and discussed. Orig. art. has: 27 figures, 1 table.

ASSOCIATION: Institut für allgemeine Chemie der Technischen Universität, Budapest (Institute for General Chemistry, Technical University)

Card 1/2

L 63677-65

ACCESSION NR: AT5021747

SUBMITTED: 03Jan64

NR REF SCV: 001

ENCL: 00

SUB CODE: GC, OP

OTHER: 020

JPRS

llc
Card 2/2

L 63899-65 EFF(c)/EWP(j) RM

ACCESSION NO: AT5022529

HU/2503/64/042/002/0131/0144

20
19
6-1

Authors: Gyorgy, Zoltan (Chuv. yem. S.) (Professor, Doctor) (Budapest); Dann, Zsigmond (Dann, Zs.) (Budapest); Farkas, Jozsef (Farkas, J.) (Doctor) (Budapest); Erdy, Imre (Erdy, I.) (Professor, Doctor) (Budapest); Fualik, Ferenc (Budapest)

Title: Investigations on catalysis. Part 40: Investigations on Raney-nickel catalysts. Section 15: Effects of the alkali used as extractant and of the hydrogen content on the activity

Source: Academiae Scientiarum Hungaricae. Acta chimica, v. 42, no. 2, 1964, 131-144

Topic Tags: nickel, catalysis, hydrogen, basic catalysis

ABSTRACT: A derivatographic method was developed for the study of pyrophoric catalysts such as those from Raney-nickel. The method was applied to catalysts prepared by using various solvents such as sodium hydroxide, potassium hydroxide, and sodium carbonate solutions. Catalysts prepared by using KOH or NaOH contained relatively high quantities of hydrogen and the hydrogen content was in proportion to their nickel content. However, no relation was evident between the catalyst's composition and its effectiveness. Orig. art. has 1 graph and 4 tables.

Card 1/2